

## CLIMATOLOGICAL DATA FOR NOVEMBER, 1912.

## DISTRICT NO. 12, COLUMBIA VALLEY.

EDWARD A. BEALS, District Editor. THEODORE F. DRAKE, Acting District Editor.

## GENERAL SUMMARY.

The month, as a whole, was an average one. The first half was stormy and the rainfall abundant. High winds were frequent on the Oregon coast and in western Washington, and warnings were displayed several times during this period. There were no losses to shipping but a few craft of the smaller type foundered or went ashore. The weather during the latter part of the month was chiefly dominated by areas of high pressure which occupied the West and Middle West. The days were clear and moderately warm and the nights cold. Less snow fell than is usual for November. Outdoor work proceeded with regularity, the fair weather of the last fortnight, especially, favoring farm and construction work. Transportation of all kinds proceeded without material interruption except that vehicle traffic in mountainous sections was impeded by muddy roads, as is usual at this season of the year.

## TEMPERATURE.

Temperatures averaged above normal over almost the entire district east of the Cascade Mountains, and also in northwestern Washington and the lower Willamette River Valley. Subnormal temperatures predominated in southwestern Oregon and southwestern Washington. The highest mean temperatures lay between 45° and 50° and occurred mainly west of the Cascades. The lowest mean temperatures, those averaging 30° or less, were recorded in the mountainous interior of Idaho. Low mean temperatures were also common in Montana and central Oregon. There were no pronounced extremes of temperature, and, except for a few stations in Idaho and Wyoming, no zero or lower temperatures were reported. A majority of maximum temperatures were reported during the second and third weeks of the month, and nearly all minimum temperatures during the last few days.

The temperature for the district averaged 40.4°, or 1.1° above the normal. The highest mean temperature was 51.2° at Gold Beach, Oreg., and the lowest 26° at Moran, Wyo. The highest maximum temperature was 75° at San Jacinto, Nev., on the 15th, and the lowest minimum -3° at Moran, Wyo., on the 27th.

## PRECIPITATION.

Precipitation was less than normal at a great majority of places, and was mainly confined to the first half of the month, although light rains fell on the 19th and 20th and on the 28th, 29th, and 30th. In the valleys of western Oregon and western Washington the amounts ranged from 5 to 8 inches, and along the coast and in the Coast Range of mountains the amounts were from 30 to 40 per cent greater. In the eastern part of the district the precipitation was lighter and there was a greater diversity in

amounts recorded in different sections. In general, they were least in central Oregon and southern Idaho and greatest in northeastern Washington and northern Idaho. Less than the usual proportion of precipitation was in the form of snow.

The average precipitation for the district was 3.63 inches, or 0.32 inch below the normal. The greatest monthly amount was 24.08 inches at Quinault, Wash., and the least monthly amount 0.01 inch at Willow Glen Stock Farm, Mont. The largest amount recorded in 24 hours was 3.03 inches at Glenora, Oreg., on the 11th. The greatest snowfall for the month was 71 inches at Snoqualmie Pass, Wash., and the next largest amount was 63 inches at Musick, Oreg.

## MISCELLANEOUS PHENOMENA.

Killing frosts that obtained generally about the 25th and 26th practically ended the growing season at all stations of moderate elevations. Stations on the seacoast and at low elevations on Puget Sound and the lower Columbia had only heavy frosts in many instances. The highest wind velocity occurred at Tatoosh on the 12th and reached a maximum of 84 miles from the south. At North Head the maximum velocity was 76 miles per hour from the southeast on the same date. A gale occurred at Lewiston on the 9th. Thunderstorms, attended in some instances by local hail storms, occurred generally between the 2d and 9th. Fogs occurred most frequently during the latter half of the month.

## THE RIVERS.

The Willamette River fell slightly until the 2d and 3d after which general rains increased its stages to a maximum about the middle of the month. No flood stages were reached except at Jefferson, Oreg., where a stage of 10.6 feet was reached on the afternoon of the 12th. The mean for the month was nearly 1½ feet above normal. Its highest reading at Portland was 11 feet on the 14th, and its highest at Eugene was 8.4 feet on the 10th. Its lowest reading at Eugene was 4 feet on the 1st, 28th, and 30th, and its lowest at Portland was 2.6 feet on the 1st and 2d.

The Columbia River averaged only slightly above normal. Its changes were not marked except at Vancouver where the highest stage, 8.2 feet on the 14th, was due to the rise in the Willamette. The highest at Umatilla was 4.4 feet on the 15th and 18th, and the lowest at Umatilla was 3.3 feet on the 30th. Its mean stage was about a foot above the mean of the preceding month.

The flow in the Snake River was quite uniform throughout the month and its mean stages were only slightly higher than those for October. The monthly mean was about one-half foot above normal. The highest reading at Lewiston was 3.7 feet on the 11th to 13th, inclusive, and the lowest reading was 2.3 feet on the 28th and 30th.

TABLE 1.—*Climatological data for November, 1912. District No. 12, Columbia Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.				
<b>Montana.</b>																				
Anaconda.....	Deer Lodge.....	5,300	10	36.0	+ 2.0	53	17†	13	27	38	0.53	- 0.25	3.6	4	7	21	2	nw.	C. D. Demond.	
Butte.....	Silver Bow.....	5,716	17	35.8	+ 2.4	52	22	13	27	34	0.43	- 0.35	3.0	4	14	5	11	sw.	J. R. Wharton.	
Columbia Falls.....	Flathead.....	3,100	16	35.9	+ 3.7	57	13	11	27	32	1.82	- 0.59	2.2	13	6*	9	10		J. M. Grist.	
Como.....	Ravalli.....	3,700	3	41.0	-	63	13	19	27	32	1.21	- 0.52	1.5	11	11	3	12		Hiram Platt.	
Dayton.....	Flathead.....	7	38.5	-	58	15	16	27	28	0.20	-	0.20	1	15	3	12		A. J. Ruechell.		
Deer Lodge.....	Deer Lodge.....	4,529	-	-	-	-	-	-	-	0.59	-	0.50	1.1	5	8	17	5		H. B. Grant.	
East Anaconda.....	do.....	5,500	6	34.5	-	55	18	17	1	31	0.47	-	4.6	4	7	21	2		C. D. Demond.	
Fortine.....	Lincoln.....	2,975	6	32.8	-	54	22	4	26	29	1.25	-	0.24	0.2	10	4	5	w.	Mike Petery.	
Hamilton.....	Ravalli.....	3,575	9	38.0	+ 3.8	61	18	13	27	34	1.22	+ 0.40	0.42	0.5	9	9	4	s.	Hamilton Chamber of Com.	
Hat Creek.....	Powell.....	6,000	2	-	-	-	-	-	-	1.08	-	0.36	19.1	10	4	10	16		M. K. Landreth.	
Haugan.....	Missoula.....	3,150	-	34.0	-	54	22	12	27	30	3.66	-	0.76	5.2	11	2	13	15		U. S. Forest Service.
Heron.....	Sanders.....	2,261	-	37.2	-	57	22	20	26	28	4.97	-	0.58	1.5	15	10	0	w.	E. Knott.	
Kalispell.....	Flathead.....	2,963	13	35.7	+ 3.7	58	13	14	27	24	0.83	- 1.07	0.32	1.2	10	3	8	19		U. S. Weather Bureau.
Libby.....	Lincoln.....	2,053	2	35.2	+ 0.5	59	22	11	27	27	3.26	- 1.01	0.65	1.0	14	1	11	18		U. S. Forest Service.
Lost Creek.....	Deer Lodge.....	5,200	2	-	-	-	-	-	-	0.54	-	0.54	10.0	1	16	10	4	w.	Frank Henault.	
Missoula.....	Missoula.....	3,225	32	36.5	+ 4.1	60	9	15	27	28	0.93	- 0.40	0.20	-	10					U. S. Weather Bureau.
Ophir.....	Powell.....	6,800	3	-	-	-	-	-	-	1.13	-	0.49	5.7	5	6	6	8	w.	E. S. Wilton.	
Osvaldo.....	do.....	4,207	12	32.4	+ 2.8	52	22	9	27	32	1.39	- 0.85	0.28	7.9	12	0	30	0		S. B. Muchmore.
Philipsburg.....	Granite.....	5,275	8	-	-	-	-	-	-	0.98	+ 0.12	0.20	7.0	8	-				G. T. Bramble.	
Plains.....	Sanders.....	2,475	13	-	-	-	-	-	-	0.98	-	0.12	1.12	5.6	17	1	16	13		James M. Self.
Pleasant Valley.....	Flathead.....	3,500	4	32.8	-	53	22	7	27	35	3.01	-	0.62	4.0	15	9	0	21		A. D. Stillman.
Polson.....	do.....	2,920	4	38.2	-	55	21	18	27	34	0.50	-	0.21	-	5	-			F. P. Brown.	
St. Ignatius.....	Missoula.....	2,700	6	37.4	-	63	13	11	26	31	0.77	-	0.23	1.5	6	3	6	21		U. S. Reclamation Service.
Saltete.....	do.....	3,600	7	-	-	-	-	-	-	2.62	-	0.48	8.0	11	9	9	21	w.	E. K. Tarbox.	
Stevensville.....	Ravalli.....	3,275	-	36.7	-	60	13	13	27	31	1.07	-	0.38	T.	5	13	8	9	s.	University Orchard Co.
Thompson Falls.....	Sanders.....	2,462	-	36.9	-	59	22	15	27	32	2.03	-	0.55	0.2	14	6	8	16	w.	U. S. Forest Service.
Trout Creek.....	do.....	2,375	-	-	-	-	-	-	-	8.53	-	0.12	5.6	17	1	16	13		James Hylent.	
Willow Glen Stock Farm.....	Deer Lodge.....	5,064	1	36.8	-	58	26	12	29	36	0.01	-	0.01	-	1	16	6	8	sw.	G. E. Luce.
<i>Wyoming.</i>																				
Afton.....	Uinta.....	6,200	8	-	-	58	9†	-	-	-	0.66	-	0.21	2.0	5	14	4	12		A. V. Call.
Alta.....	do.....	7,000	2	30.0	-	59	15	- 1	27	40	4.33	-	2.70	12.0	6	11	6	13	sw.	Mrs. Lucy Brown.
Bechler River.....	Yellowstone Park.....	5,900	12	32.0	+ 1.2	58	9	3	27	36	0.94	- 0.11	0.25	9.0	7	14	5	11	w.	U. S. Army.
Bedford.....	Uinta.....	5,900	26.0	-	-	50	9	- 3	27	31	0.94	-	0.20	10.5	10	0	15	15		C. G. Heinrich.
Moran.....	do.....	7,000	6	-	-	-	-	-	-	-	-	-	-	-					U. S. Reclamation Service.	
Snake River.....	Yellowstone Park.....	-	-	-	-	-	-	-	-	-	-	-	-	-					U. S. Army.	
<i>Nevada.</i>																				
San Jacinto.....	Elko.....	-	7	35.1 <sup>a</sup>	-	75 <sup>a</sup>	15	4 <sup>a</sup>	25†	47 <sup>a</sup>	0.06	-	0.06	0.6	1	14	6	10	s.	F. W. Merchant.
<i>Utah.</i>																				
Standrod.....	Boxelder.....	-	7	36.8	-	57	9	18	26	30	0.87	-	0.32	5.4	7	19	5	6	sw.	T. B. Jones.
<i>Idaho.</i>																				
Albion.....	Cassia.....	4,650	10	38.8	+ 1.0	64	8	13	27†	45	1.06	- 0.26	0.50	0	4	9	18	3 <sup>b</sup>	w.	C. E. Bocock.
Almo.....	do.....	3	-	-	-	-	-	-	-	1.73	-	0.70	1.0	6	20	5	5	ne.	Wm. D. Cahoon.	
American Falls.....	Oneida.....	4,341	21	35.6	+ 0.5	60	8†	4	28	44	1.12	- 0.13	0.68	-	3	24	5	1		George Stoll.
Arrowrock.....	Boise.....	3,100	-	40.9	-	65	10	19	26	35	0.65	-	0.21	0	6	14	9	7	w.	U. S. Reclamation Service.
Blackfoot.....	Bingham.....	4,503	16	35.4	+ 1.2	63	9	9	27	35	0.85	- 0.07	0.22	0.5	6	13	4	4	sw.	E. A. Dowd.
Blackfoot Dam.....	Bannock.....	6,200	3	32.6	-	55	9	6	27	35	1.03	-	0.28	11.0	8	12	8	10		S. C. Waddell.
Bogus Creek.....	Boise.....	4,200	4	-	-	-	-	-	-	2.51	-	0.47	2.0	11	9	13	8		F. P. Ingraham.	
Boise.....	Ada.....	2,739	27	43.0	+ 3.4	68	9	24	29	27	0.88	+ 0.02	0.56	T.	7	5	8	17	nw.	U. S. Weather Bureau.
Bonners Ferry.....	Bonner.....	1,850	5	37.4	-	57	19	3	28	34	4.45	-	1.40	T.	7	1	8	21	sw.	W. H. Heideman.
Boulder Mine.....	Boise.....	4,800	3	-	-	-	-	-	-	3.15	-	1.07	7.1	11	17	6	7		Patrick Moriarty.	
Buhl.....	Twin Falls.....	3,900	5	40.6	-	65	8	20	26	31	1.07	-	0.72	T.	7	15	8	7	se.	S. C. Orr.
Caldwell.....	Canyon.....	2,372	8	41.6	-	67	9	18	24†	30	0.92	-	0.42	0	6	8	12	10	e.	W. J. Boone.
Caldwell Exp. Station.....	do.....	40.1	-	-	-	-	-	-	-	0.46	-	0	5	-						C. B. Hampson.
Cambridge.....	Washington.....	2,651	16	40.0 <sup>a</sup>	+ 2.4	60 <sup>a</sup>	14	16 <sup>a</sup>	26	34 <sup>a</sup>	2.00	- 0.45	1.00	-	8				nw.	Charles H. Shepherd.
Cedar Creek Dam.....	Twin Falls.....	5,220	-	-	-	-	-	-	-	1.20	-	0.32	5.0	6	16	5	9	sw.	Robert Hoffman.	
Chesterfield.....	Bannock.....	5,424	16	32.4	+ 2.1	51	8	8	27	33	1.32	+ 0.44	0.50	4.5	6	16	9	5		Charles S. West.
Clarks Fork.....	Bonner.....	2,084	-	37.8	-	56	22	21	26	22	6.11	-	0.75	-	18	7	7	16	e.	William Potter.
Clyde.....	Custer.....	6,000	12	-	-	-	-	-	-	-	-	-	-	-					R. L. Stutcliffe.	
Council.....	Adams.....	3,059	1	39.7	-	62	9†	20	21	29	3.19	-	1.08	2.0	10					F. L. Featherston.
Culdesac.....	Nez Perce.....	1,520	4	40.4	-	62	9	23	27	28	2.05	-	0.50	0.5	11	7	7	16		Mrs. B. Caldwell.
Deary.....	Latah.....	2,854	-	-	-	-	-	-	-	2.80	-	-	2.0	-					W. J. Davis.	
Dent.....	Clearwater.....	1,350	6	-	-	-	-	-	-	-	-	-	-	-					Emil Schuessler.	
Driggs.....	Fremont.....	6,097	5	30.6	-	57	9	2	27	38	1.03	-	0.20	13.1	7	9	7	14	sw.	Walter H. Durrant.
Emmett.....	Owyhee.....	2,350	5	41.7	-	69	9	19	25	31	0.76	-	0.30	0	4	7	12	11	s.	M. B. Merritt.
Forney.....	Elmore.....	2,575	13	45.1	+ 1.3	70	9	20	24	32	0.70	- 0.02	0.40	0	3	20	4	6	e.	Ass A. Kenison.
Glenns Ferry.....	Canyon.....	2,569	4	40.3	-	63	10	15	27	37	0.24	-	0.08	0	5	19	2	11	s.	I. E. Perkins.
Gooding.....	Lincoln.....	3,572	3	39.0 <sup>b</sup>	-	64 <sup>b</sup>	9	12	26	36	0.88	-	0.65	0	7	16	5	9	e.	John Krall, jr.
Grand Forks.....	Shoshone.....	3,000	3	35.4	-	50	22†	15</												

TABLE 1.—Climatological data for November, 1912. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.				
<i>Idaho—Continued.</i>																						
Little Carnes.	Elmore.	5,000	3	30.8	—	51	13	4	29	45	1.46	—	0.56	8.5	5	7	5	18	e.	Solon McCoy.		
Loon Creek.	Custer	6,000	3	30.7	—	54	11	8	29	31	0.03	—	0.32	3.5	12	10	5	15	sw.	Mrs. Mary Williams.		
MacKay.	do.	5,897	5	30.8	—	65	9	20	26	29	0.94	—	0.02	0.5	2	17	12	1	nw.	U. S. Forest Service.		
Meridian.	Ada.	2,657	2	42.2	—	64 <sup>a</sup>	9	22	29	26 <sup>b</sup>	1.90	—	0.61	T.	7	5	11	14	se.	A. W. Garrett.		
Mesa.	Adams.	3,275	2	39.3	—	56	13	25	27	19	2.89	—	0.96	—	5	10	0	20	sw.	I. S. Carter.		
Middle Fork.	Idaho.	1,397	2	40.2	—	68	9	17	26	39	1.56	—	0.45	0	14	12	1	17	—	Jos. McGhee.		
Milner.	Twin Falls.	4,110	8	40.2	—	56	13	25	27	19	2.89	—	0.75	0.5	5	16	8	6	se.	James K. Young.		
Moscow.	Latah.	2,748	20	39.4	+ 1.6	56	9 <sup>c</sup>	22	26	25	2.60	—	0.63	0.55	1.0	15	2	10	18	se.	University of Idaho.	
Mountainhome.	Elmore.	3,150	7	39.8	—	60	8 <sup>c</sup>	13	26	37	0.79	—	0.42	0	4	13	7	10	w.	Mrs. Ellen Manion.		
Murtaugh.	Twin Falls.	6	37.8d	—	65 <sup>d</sup>	10	14 <sup>d</sup>	27	41 <sup>b</sup>	0.44	—	—	T.	3	—	—	—	—	w.	J. E. Steinour.		
New Meadows.	Adams.	3,950	8	—	—	60	13	20	27	32	0.95	—	0.44	0	5	12	3	15	e.	E. G. Dunn.		
Nezperce.	Lewis.	3,082	3	40.2	—	60	9	16	26	30	1.13	—	0.40	T.	3	7	20	3	—	P. Mitchell.		
Oakley.	Cassia.	4,700	19	39.8	+ 1.1	62	9	20	26	32	0.85	+ 0.04	—	T.	7	5	11	14	—	John Adams.		
O'Hara Bar.	Idaho.	1,557	2	37.8 <sup>k</sup>	—	52 <sup>k</sup>	9	22 <sup>k</sup>	27	25 <sup>k</sup>	2.94	—	0.70	2.2	15	3	20	7	—	J. D. Agnew.		
Orofino.	Clearwater.	1,027	8	39.2	—	55	10 <sup>f</sup>	22	27	32	2.86	—	0.72	3.0	15	6	4	20	n.	Geo. Alteneder.		
Payette.	Canyon.	2,159	22	41.1	+ 0.6	64	9	18	29	28	1.50	+ 0.29	0.56	T.	9	8	6	16	s.	E. F. Allen.		
Pierson.	Custer.	7,000	2	25.8	—	54	1†	—	25	46	0.61	—	0.29	6.0	3	13	0	17	—	David P. Clarke.		
Pine.	Elmore.	4,100	3	—	—	64	9	16	26	30	1.13	—	0.45	0	5	15	6	9	se.	Mrs. Jennie Potter.		
Pleasant Valley.	Ada.	3,000	5	40.2	—	64	9	16	26	30	1.13	—	0.45	T.	7	7	13	10	se.	C. E. Friedrich.		
Pocatello.	Bannock.	4,483	13	39.9	+ 3.6	62	9	14	27	32	0.95	+ 0.40	0.36	T.	7	7	13	10	sw.	U. S. Weather Bureau.		
Pocatello Nursery.	do.	5,396	5	—	—	57 <sup>j</sup>	8†	—	—	—	—	—	—	4.0	8	14	7	9	sw.	Mrs. Fannie E. Say.		
Poplar.	Bonneville.	5,500	2	34.0	—	55	18	6	27	37	0.96	—	0.31	4.0	8	14	7	9	sw.	C. M. Lawrence.		
Porthill.	Bonner.	1,665	23	35.8	+ 2.2	51	19	16	27	32	3.59	+ 0.28	0.72	3.0	15	6	4	20	s.	H. A. French.		
Powers Ranch.	Boise.	4,300	3	—	—	60	13	22	27	25	1.19	—	0.32	1.0	5	19	0	11	—	Mrs. Mary French.		
Priest River Exp. Station No. 1.	Bonner.	2,500	1	34.7	—	50	22	17	27	22	5.18	—	0.88	3.3	14	2	6	22	s.	D. R. Brewster.		
Priest River Exp. Station No. 2.	do.	2,500	1	35.4	—	55	22	16	27	28	5.13	—	0.82	3.3	13	2	6	22	e.	Do.		
Priest River Exp. Station No. 3.	do.	1	33.3	—	—	55	22	10	26	30	5.83	—	0.85	3.3	13	2	6	22	e.	Do.		
Pyle Creek.	Boise.	3,100	3	—	—	—	—	—	—	—	2.33	—	1.11	0.6	10	14	3	13	w.	P. V. Smith.		
Rattlesnake Creek.	Elmore.	4,000	3	—	—	—	—	—	—	—	1.96	—	1.00	T.	8	13	4	13	—	Richard M. Green.		
Richfield.	Lincoln.	4,306	3	37.0	—	61	9	13	29	34	0.79	—	0.69	0	2	10	18	2	ne.	Idaho Irrigation Co.		
Roseberry.	Boise.	4,872	1	31.5	—	52	9†	4	26	33	—	—	—	—	5	11	14	14	s.	Rev. T. P. Graham.		
Roseworth.	Twin Falls.	4,650	6	38.6	—	64	9	15	26	43	1.53	—	0.36	0.2	7	4	18	8	nw.	D. B. Hartwell.		
Rupert.	Lincoln.	4,204	6	38.6	—	64	9	15	26	43	1.53	—	0.62	0.2	7	18	4	8	w.	Will Parry.		
St. Anthony.	Fremont.	4,968	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Heber C. Sharp.		
St. Maries.	Kootenai.	2,263	15	38.4	- 0.2	52	9†	21	27	24	3.59	- 0.71	0.76	0.5	14	1	7	22	ne.	J. S. Turnbull.		
Salmon.	Lemhi.	4,040	7	35.8	—	60	9†	9	27	32	0.23	—	0.13	T.	3	10	16	4	nw.	Z. T. Vincent, Jr.		
Sandpoint.	Bonner.	2,086	2	39.0 <sup>c</sup>	—	64 <sup>h</sup>	15	18 <sup>b</sup>	28	35 <sup>b</sup>	5.06	—	0.70	1.0	12	6	5	19	s.	S. M. Moore.		
Sheep Hill.	Boise.	5,000	3	—	—	63 <sup>a</sup>	9	18 <sup>i</sup>	24†	30 <sup>i</sup>	0.72	—	1.40	5.0	11	—	—	—	—	Clifford M. Gardner.		
Shoshone.	Lincoln.	3,908	4	39.2 <sup>c</sup>	—	63 <sup>a</sup>	9	18 <sup>i</sup>	24†	30 <sup>i</sup>	0.72	—	0.61	T.	4	7	22	1	e.	Zell Truman.		
Silver City.	Owyhee.	6,280	5	—	—	60	9†	21	27	25	1.71	—	0.77	4.6	11	10	8	12	sw.	Russell Stoddard.		
Smith Prairie.	Elmore.	5,200	3	—	—	60	9	18	26	30	1.92	—	0.77	4.6	11	10	8	12	sw.	Wm. W. Newell.		
Soldier Creek.	Blaine.	5,755	2	34.1	—	50	13†	13	27	31	1.79	—	1.03	—	7	13	5	12	nw.	J. E. Minear.		
Spirit Lake.	Kootenai.	2,560	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	M. C. Krause.		
Springfield.	Bingham.	4,420	4	36.2	—	64	9	11	26†	39	0.55	—	0.20	T.	6	8	17	5	sw.	Mrs. W. A. Edwards.		
Spring Hill.	Ada.	3,607	2	42.4	—	63	9†	20	28†	31	1.30	—	0.56	0.8	7	8	8	14	se.	Ray G. Lyons.		
Sugar.	Fremont.	4,832	5	32.8	—	61	9	10	27	36	0.39	—	0.31	3.0	3	19	1	10	sw.	Utah-Idaho Sugar Co.		
Sunnyside.	Elmore.	3,500	3	44.1	—	68	11†	16	26	42	0.72	—	0.40	0	7	—	—	—	se.	Col. M. W. Wood.		
Tripod Mountain.	Boise.	4,300	3	—	—	65	9	16	26	32	1.18	—	0.85	0	4	21	8	1	w.	Mrs. Verna Paddock.		
Twin Falls.	Twin Falls.	3,825	7	40.7	—	67	22	18	27†	46	1.10	—	0.64	—	0	4	7	20	3	sw.	J. A. Waters.	
Vernon.	Fremont.	5,050	14	34.6	+ 1.2	61	14	20	27	37	0.96	- 0.30	0.25	1.0	6	17	7	6	sw.	A. M. Slattery.		
Wallace.	Shoshone.	2,728	5	37.0	—	55	18	20	26†	21	5.75	—	0.50	0.50	0	15	—	—	e.	U. S. Weather Bureau.		
Weiser.	Washington.	2,114	—	41.0	—	68	9	18	26	30	1.41	—	0.38	0.88	0	8	7	7	s.	J. W. Lapish.		
Wendell.	Lincoln.	3,400	4	40.2	—	65	9	16	26	32	1.18	—	0.85	0	4	21	8	1	w.	Chas. L. Dingler.		
<i>Washington.</i>																						
Aberdeen.	Chehalis.	162	21	44.7	- 1.0	59	16	27	28	19	12.65	- 2.17	1.49	0	24	0	26	4	w.	Carl S. Weatherwax.		
Anacortes.	Skagit.	60	18	45.8	—	65	16	31	26†	27	3.78	- 0.74	0.79	0	21	3	19	8	sw.	Douglas Allmond.		
Anatone.	Asotin.	—	—	39.8	—	59	15	17	29	31	—	—	0.45	T.	9	9	16	5	sw.	W. A. Hamilton.		
Baker.	Skaagit.	390	6	41.0	—	51	19	30	26†	14	9.71	—	1.28	0.9	19	7	1	22	—	Robt. M. White.		
Bellingham (near).	Whatcom.	60	17	45.8	- 0.8	61	17	26	23	19	—	0.50	—	1.05	0	15	6	3	21	—	S. B. Mayhew.	
Blaine.	do.	107	1	43.9	—	60	17	25	25	23	5.27	—	0.90	0	19	3	11	16	se.	U. S. Bureau Plant Industry		
Blewett.	Chelan.	2,200	3	—	—	58	12†	30	14†	20	6.40	- 0.46	1.22	0.90	17.0	7	—	—	—	I. M. Scott.		
Bremerton.	Kitsap.	30	14	—	—	54	22	22	19	15	1.57	—	1.20	34.0	16	2	12	7	8	15	—	John Burmeister.
Bumping Lake.	Okanogan.	1,620	2	37.4	—	52	22	17	26	30	0.57	—	0.59	0.2	12	7	8	15	sw.	U. S. Navy Yard.		
Cedar River.	Yakima.	3,400	1	34.9	—	52	22	17	26	30	0.57	—	1.20	34.0	16	8	3	19	19	—	Mrs. H. F. Bertram.	
Centralia.	King.	535	5	45.0	- 0.2																	

TABLE 1.—Climatological data for November 1912. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.								Precipitation, in inches.								Sky.	Prevailing wind direction.	Observers.	
				Mean.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.						
<b>Washington—Contd.</b>																							
Goldendale.	Klickitat.	1,600	6	41.8	58	22	24	27	26	2.52	-0.56	0.32	0	12	2	19	9	w.			Klickitat Co. Abstract Co. C. H. Clever.		
Granite Falls.	Snohomish.	397	9							7.05	0.90	0	0	24	2	7	21	e.					
Grays River.	Wahkiakum.																						
Guler.	Klickitat.	2,200	3	42.6	65	22	21	30	31	1.19	0.56	0	0	9	5	16		se.			Frank Kuehnle.		
Hanford.	Benton.																				T. Lee Bash.		
Hutton.	Adams.	1,100	7	40.8	60	22	24	30	27	1.36	0.39	T.	10	4	5	21		sw.			Dr. A. V. Marion.		
Huntsville.	Columbia.	1,400	4																		Mrs. S. J. Hill.		
Irene Mountain.	Okanogan.	3,015	3																		Mrs. Theo. Wheeler.		
Kennewick.	Benton.	368	17	43.1	+ 1.1	67	22	15	27	46	1.08	+ 0.15	0.42	0	6	9	12	17		se.	R. E. Reed.		
Kent.	King.	53		44.8		63	1	27	26	24	8.30		1.11	0	20	3	6	21	s.		A. O. Jeffries.		
Kettle Falls.	Stevens.	1,265	3	37.4	55	16†	20	26†	24	3.34	0.72	1.0	14	6	11	13					H. H. Cole.		
Kiona.	Benton.	430	7																				
Kosnos.	Lewis.	775	6	43.2		62	16	26	26	29	7.22		1.24	0	19	0	23	7	ne.		J. A. Ulsh.		
La Center.	Clarke.	250	15	43.1	- 0.3	59	12	25	26†	30	6.46	- 2.97	1.04	0	18	5	11	14	s.		Joseph Brothers.		
La Crosse.	Whitman.	1,400	3	42.0		64	9	25	25	26	2.19		0.46	T.	11	6	8	16	e.		M. E. Schreck.		
Lake Clealum.	Kittitas.	2,171	3								5.04		0.72	8.5	12	0	0	30	nw.		U. S. Reclamation Service.		
Lake Kachess.	do.	2,235	4	37.0		53	23	23	27	23	5.60		1.45	25.0	14	5	12	13	w.		Do.		
Lake Keechelus.	do.	2,479	4								9.01		1.36	21.7	19	2	7	21	e.		Do.		
Lakeside.	Chelan.	1,116	21	40.2	+ 2.2	58	22	25	27	20	1.49	- 0.42	0.55	0.5	10	1	18	11	w.		W. H. Van Meter.		
Laurel.	Klickitat.	1,900	14	34.7		50	19†	16	27	25	2.55		0.42	2.5	16	4	5	21	s.		Mrs. Minnie E. Strout.		
Laurier.	do.	1,644	3	49.0*		69	23	38d	14†	29d	13.34		1.68	0	24	0	11	19	s.		U. S. Engineer Corps.		
Longmire Springs.	Pierce.	2,800	3																				
Lost Creek.	Okanogan.	3,125	3																				
McConaughy.	Grant.	1,072	1	39.8		56	5	23	26†	22	0.90		0.40	T.	11	10	4	16	n.		L. F. McConaughy.		
McCumbre Ranch.	Yakima.	2,182	3								6.40		1.15	T.	13	6	14	10	sw.		Mrs. Mary McCumber.		
Moses Lake.	Grant.	1,070	1																				
Mottinger.	Benton.	307	12	46.0	+ 1.9	66	22	27	27	29	0.79	- 0.34	0.30	0	6	16	9	5	e.		G. H. Mottinger.		
Mount Pleasant.	Clallam.	500	1	41.5		61	17	30	28	26	5.20		1.10	T.	19	0	14	16			Wm. M. Dorr.		
Moxee.	Yakima.	1,000	20	40.2	+ 1.0	66	22	18	28†	38	1.04	- 0.18	0.40	0	10	10	13	7	se.		H. B. Scudder.		
Newport.	Stevens.	2,400	2	35.6		53	22	19	27	23	5.49		0.87	1.0	14	3	12	15	e.		Chas. M. Talmadge.		
Nighthawk.	Okanogan.	3,050	3																		Steve Nagy.		
North Head.	Pacific.	211	10	48.0	+ 0.3	57	16	40	25	11	9.79	+ 3.46	1.54	0	21	2	5	23	s.		U. S. Weather Bureau.		
Northport.	Stevens.	1,350	13	35.4		54	19	19	25†	33	1.18	+ 0.73	0.56	3.0	16	12	6	12			W. F. Case.		
North Sundale.	Klickitat.	3	43.0			61	22	22	29	28	1.27		0.40	0	11							Ruth J. Shepard.	
North Yakima.	Yakima.	1,070	3	40.1		62	22	20	27†	31	1.04		0.46	0	8	7	9	14	s.		Albert Bender.		
Odessa.	Lincoln.	1,540	9	40.0		66	22	19	26	24	2.29		0.43	0	13	4	22	4	sw.		H. W. Rieke.		
Oila.	San Juan.	50	22	45.8	+ 1.4	58	13	33	28	16	5.17	+ 0.21	0.74	0	18	3	7	20	se.		Cecil S. Willis.		
Olympia.	Thurston.	45	34	44.8	+ 0.4	60	22	28	28	23	9.98	+ 1.38	1.50	0	20	1	9	20	sw.		M. O. Connor.		
Omak.	Okanogan.	850	3	38.6		57	19	19	27†	31	1.69		0.69	0	8	11	5	14	s.		Saint John Umbrage.		
Oroville.	do.	922	2	40.6		55	2†	21	27	26	2.80		0.70	2.0	11	12	5	13			M. C. Jackman.		
Peola.	Garfield.	5,000	3								2.29		0.52	5.6	14	13	6	11	sw.		Samuel Gruell, sr.		
Pomeroy.	do.	1,500	20	43.2*	+ 1.2	64	9†	24	26	31†	1.52	- 1.05	0.44	T.	10	0	12	18	w.		Peter McClung.		
Port Crescent.	Clallam.	259	17	42.3	0.0	56	20	30	28	22	6.07	- 1.38	1.34	0	22	0	4	26	s.		U. S. Weather Bureau.		
Port Townsend.	Jefferson.	80	22	45.6	+ 0.5	58	1	34	29	16	2.17	- 0.61	0.60	0	14	5	0	25	se.		F. Plummer.		
Prosser.	Benton.	661	1	43.8		68	22	23	27†	23				0	0	10	12	8	w.		E. L. Capps.		
Pullman.	Whitman.	2,550	20																				
Quets River.	Chehalis.	16	1	44.9		55	16†	31	24	16	16.48		2.81	0	27	5	3	22	s.		C. A. Bullard.		
Quinault.	do.	300	5	43.9		56	1	30	28†	21	24.08		2.30	0	25	3	12	15	w.		A. V. Higley.		
Republie.	Ferry.	2,628	12	34.0	+ 0.5	50	19	12	26	23	1.16		0.25	2.0	14	7	4	19	nw.		Geo. B. Stocking.		
Rex Creek.	Chehalis.	1,135	5	40.8*		56	22	28*	27	21	2.55		0.97	0	10	1	10	16	nw.		J. W. Nicol.		
Ritzville.	Adams.	1,825	13										2.29	+ 1.00	0.60	0	10	6	14	sw.		Agent N. P. Ry.	
Robertsville.	Klickitat.	37.5											0.90	T.	15	6	18	6			R. R. Couger.		
Rock Lake.	Whitman.	1,910	6																				
Rossalia.	do.	2,425	20	38.7	+ 0.8	57	18	20	26†	21	2.58	- 0.58	0.44	0	15	2	8	20	s.		Hans Mumm.		
Russells Ranch.	Yakima.	2,870	3										0.65	14.0	13	11	3	16	w.		Mrs. Adella Russell.		
Seattle.	King.	125	21	46.2	+ 1.7	61	1	35	26	16	6.82	+ 0.96	1.50	0	21	0	6	24	se.		U. S. Weather Bureau.		
Sedro Woolley.	Skagit.	38	15	44.8	+ 0.6	62	17	27	26†	23	5.45	- 1.77	0.81	0	21	5	7	18	sw.		Mrs. H. L. Devin.		
Sixprong.	Klickitat.	1,240	5	43.7		64	22	24	27	26	1.22		0.40	0	11	10	6	14	sw.		C. E. Comstock.		
Skagit Power Dam.	Whatcom.	510	2																				
Snohomish.	do.	55	18	45.2	+ 0.5	67	1	28	26	26	6.26	- 0.25	0.85	0	15	13	0	17	s.		James Bylling.		
Snoqualmie Falls.	King.	667	13	44.6		58	16	30	25†	22	9.88	+ 0.62	1.32	0	23	8	6	22			O. N. Wiswell.		
Snoqualmie Pass.	do.	3,000	3										7.10		9	6	15			G. R. Westcot.			
Snyders Ranch.	Okanogan.	2,200	3	33.2		53	22†	12	27	27	1.54		0.45	8.0	10	6	10	14	e.		George M. Snyder.		
South Bend.	Pacific.	140	17	45.2	- 2.5	61	16	27	28	21	16.07	+ 1.95	1.68	0	20	7	9	14	w.		Mrs. Winifred Buckingham.		
Spokane.	Spokane.	1,943	31	40.2	+ 2.9	58	18	21	28	21	2.29	- 0.01	0.56	0.3	14	1	6	23	sw.		U. S. Weather Bureau.		
State University.	King.	170	3	46.2		58	1	36	26	12	6.68		0.88	0	18	3	4	23	s.		University of Washington.		
Stokes Ranch.	Okanogan.	2,670	3										1.91		0.55	16.0	12	3	18	9	sw.		Chas. W. Gunn.
Summer.	Pierce.	77	4	45.0		62	12†	26	25	29	8.36		1.28	0	23	7	6	17	s.		H. E. Thompson.		
Sunnyside.	Yakima.	740	17	41.8	+ 2.0	68	22	20	27	35	0.96	- 0.04</											

TABLE 1.—Climatological data for November, 1912. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, indegrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Greatest in 24 hours.	Total snowfall, unmeted.							
Oregon.																				
Albany	Linn	212	30	45.7	+ 0.5	63	12	28	26	20	6.51	+ 0.43	1.45	0	16	4	2	24	s.	F. M. French.
Alpine	Benton	400	15	46.3	- 1.0	73	19	29	26†	31	2.75	0	7	5	15	10	sw.	J. D. McPherson, jr.		
Ashland	Jackson	1,963	28	44.8	- 0.1	68	8	24	25†	29	2.54	+ 0.10	0.85	0	22	4	6	20	uw.	G. G. Eubanks.
Astoria	Clatsop	16	51	47.8	- 0.1	60	12	35	28	16	15.11	+ 3.58	2.52	0	10	8	7	16	sw.	Irving Club.
Austin	Grant	4,250	1	34.2 <sup>2</sup>	- 57 <sup>1</sup>	9	9	29	41 <sup>1</sup>	11	1.56	- 0.26	5.0	0	8	7	7	16	w.	U. S. Forest Service.
Baker	Baker	3,466	22	38.8	+ 3.9	61	9	17	26	25	0.23	- 1.94	0.98	0	15	12	3	15	se.	U. S. Weather Bureau.
Bay City	Tillamook	14	18																	John O. Bozorth.
Bend	Crook	3,629	7																	Bend Bulletin.
Black Butte	Lane	1,200	11	41.6	- 2.0	59	8	28	22†	23	7.95	- 0.44	1.15	0	15	10	2	18	nw.	Wm. Harris.
Blalock	Gilliam	237	14																	Geo. W. Long.
Brogan	Malheur	2,600	2	41.4		64	6	21	25	33	0.27		0.13	0	3	12	10	8	s.	A. B. Cox.
Buell	Polk	1																		E. V. D. Paul.
Burns	Harney	4,157	21	38.3	+ 1.9	60	12	14	30	38	1.66	+ 0.07	0.85	1.2	10	10	13	7	w.	J. C. Welcome, jr.
Cascade Locks	Hood River	100	22	45.0	- 0.3	54	9 <sup>1</sup>	31	29	21	11.40	- 0.41	1.83	0	18	10	2	18	sw.	Val W. Tomkins.
Cazadero	Clackamas	503	3	46.4		63	12	29	27†	24	6.97		1.34	0	8	8	5	15	se.	Alf. Drill.
Clift	Lake	4,300	5	36.4		57	12†	5	24†	49	0.96		0.30	0	6	9	6	15	nw.	John C. Green.
Condon	Gilliam	2,884	5																	C. H. Williams.
Corvallis	Benton	266	24	45.2 <sup>2</sup>	- 0.5	61 <sup>1</sup>	12	28 <sup>1</sup>	29	22 <sup>1</sup>	8.90	+ 2.08	1.55	0	13	12	6	12	sw.	Oregon Agricultural College.
Crescent	Klamath	4,400	24	35.6		59	16†	9	25	46	2.14		0.77	5.5	10	10	13	7	s.	U. S. Forest Service.
Dayville	Grant	2,200	18	44.0	+ 0.2	69	2	15	25†	36	0.59	- 0.69	0.23	0	5	10	13	7	se.	Dr. J. Campbell-Martin.
Deadwood	Lane	350	22	46.6		62	8	30	29	22	15.51		2.57	0	16	12	2	16	s.	Jos. Slemmons.
Doraville	Columbia	600	10	44.1	+ 0.3	57	16	31	23†	19	7.07	- 2.37	1.36	0	22	5	5	20	sw.	Jos. Hackenburg.
Drain	Douglas	300	10	47.2		68	8	30	21	27	6.55		0.90	0	17	2	10	18	sw.	Ira Wimberly.
Echo	Umatilla	125	8	43.9		66	5†	22	29	33	0.90		0.20	0	8	6	1	23	w.	R. B. Staneson.
Ella	Morrow	830	8	43.2		66	3	24	29†	25	1.18	- 0.30	0.25	0	9	15	5	10	sw.	Carl F. Troedson.
Eugene	Lane	449	22	50.4	+ 3.8	70	10†	31	21	38	6.98	+ 1.79	1.22	0	18	7	5	18	se.	University of Oregon.
Fairview	Coos	142	16																	Wm. Bettys.
Forest Grove	Washington	220	23																	Pacific University.
Gardiner	Douglas	72	23																	Hon. J. S. Gray.
Glendale	do	1,441	8	47.8		66	17	30	22	27	2.82		0.60	0	15	10	13	7	nw.	B. J. Simpson.
Glenora	Tillamook	575	21	42.4	- 1.2	52	9	27	26	24	23.29	- 2.88	3.03	0	16	2	21	sw.	Mrs. Jennie A. Reher.	
Gold Beach	Curry	40	11	51.2		65	18	39	20†	19	11.80	+ 0.48	2.20	0	15	14	15	1	s.	John W. Riley.
Grants Pass	Josephine	956	24	44.5	- 0.1	69	8	29	15	26	4.71	+ 0.13	0.73	0	19	2	3	25	sw.	John B. Paddock.
Grass Valley	Sherman	2,381	11	39.4	+ 0.5	62	22	18	27	37	1.31	- 0.26	0.34	0	9	4	3	23	nw.	Agent O. (-) W. R. & N. Co.
Gurdene	Umatilla	3,500	3	42.1		55	13	24	26	24	0.11		0.02	0	6	5	18	7	s.	Miss Belle Ely.
Headworks	Clackamas	719	10	45.2		60	5	28	29	27	9.49	- 1.99	1.48	0	19	9	12	9	e.	Portland Water Works.
Heppner	Morrow	1,950	22	44.2	+ 0.5	67	8	25 <sup>1</sup>	25	33 <sup>1</sup>	0.99	- 0.35	0.26	0	10	5	19	6	sw.	Frank Gilliam.
Hermiston	Umatilla	451	5	41.8		61	14	19	27	33	0.89		0.30	0	12	4	21	5	sw.	C. W. Kellogg.
Hermoso Rio	Crook	2,110	22	36.5 <sup>2</sup>		56 <sup>1</sup>	13	22 <sup>1</sup>	23 <sup>1</sup>	24 <sup>1</sup>	3.41		0		7	7	16			Carl T. Hubbard.
Hood River	Hood River	300	22	43.0	+ 0.9	55	12	25	29	25	5.02	- 0.87	1.10	0	13	9	8	13	ne.	Edwd. W. Birge.
Hood River, No. 2	do	485	1	44.4		56	15	28	29	24	4.90		1.00	0	14	2	18	10	w.	W. H. Lawrence.
Hood River, No. 3	do	620	1	44.3		62	6	25	29	29	4.31		1.20	0	14	2	18	10	w.	U. A. Newman.
Hood River, No. 4	do	850	1	42.2		57	24	24	29	27	4.61		0.84	0	13	11	6	13	w.	P. L. Smith.
Huntington	Baker	2,165	11	42.0		65	8 <sup>1</sup>	20	29	30	0.32	- 0.85	0.28	T.	3	4	24	2	sw.	Agent O. (-) W. R. & N. Co.
Jacksonville	Jackson	1,640	24	42.4	- 1.6	67	8	25	21†	28	3.73	- 0.08	1.10	0	11	2	10	18	e.	E. Britt.
Joseph	Wallowa	4,400	23	36.7	+ 2.5	57	13	18	30	25	1.43	- 0.55	0.65	7.0	4	12	3	15	s.	F. F. McCully.
Klamath Agency	Klamath	4,169	4	38.1		68	1	12	29	42	4.95		1.20	1.5	8	11	9	10	s.	N. D. Ginsbach.
Klamath Falls	do	4,100	39	1.1	- 0.1	60	16	24	29	29	2.51	+ 1.02	1.04	0.5	11	9	10	11	nw.	Augusta J. Hayden.
La Grande	Union	2,784	24	42.3	+ 1.5	60	9	18	25†	29	1.64	- 0.51	0.28	0	13	10	12	3	n.	W. A. Worstell.
Lakeview	Lake	4,825	29	39.2 <sup>1</sup>	+ 1.3	60 <sup>2</sup>	25	19 <sup>1</sup>	20 <sup>1</sup>	35 <sup>1</sup>	1.62	- 0.28	0.93	1.9	8	8	6	16	s.	Ralph C. Koozer.
McKenzie Bridge	do	1,400	11	40.8	- 1.7	60	12	21	26	34	10.13	- 2.52	1.36	0	20	5	5	20	sw.	Geo. Frissell.
McMinnville	Yamhill	182	25	46.0	+ 0.8	60	5†	27	25	27	7.02	- 1.46	2.00	0	18	8	3	19	sw.	M. E. Pettit.
Marshfield	Coos	34	11	48.7		65	17	32	21†	28	12.07		1.46	0	20	9	8	13	sw.	U. S. Weather Bureau.
Meadow Brook Ranch	Hood River	850	1	42.8		55	22†	26	29	23	5.33		1.17	0	14	8	12	10	sw.	John W. Palmer.
Medford	do	1,425	2	43.2		72	8	27	22	27	3.38		1.00	0	15	7	9	14	nw.	U. S. Weather Bureau.
Merrill	Klamath	4,070	7	41.0 <sup>b</sup>		70 <sup>b</sup>	17†	16	29	54	1.97		0.75	0	5	12	8	10	sw.	U. S. Reclamation Service.
Metolius	Crook	2,525	2	31.4		70	16	9	10†	49	0.62		0.30	0	3	16 <sup>a</sup>	8 <sup>a</sup>	w.	W. E. Lottman.	
Mikkalo	Gilliam	1,400	6																	Frank Little.
Miramont Farm	Clackamas	195	24	44.7	+ 1.1	61	12	27	28	24	6.78	- 0.11	1.43	0	19	11	2	17	s.	G. Muecke.
Mt. Angel	Marion	485	26	46.6	+ 1.2	61	9	32	23	21	7.06	- 0.27	1.23	0	15	8	4	18	s.	Dr. Urban Fischer.
Mt. Hood	Hood River	1,450	1	40.4		58	22	29	29	28	4.73		0.85	0	16	1	23	6	sw.	Isaac Beal.
Music	Douglas	5,000	3	40.2		55	27	28	24	25	6.85		1.03	0	14	12	1	17	sw.	Alex Lundberg.
Newport	Lincoln	68	25	48.0	- 1.0	58	16	34	29	16	13.04	+ 1.57	2.80	0	19	5	6	19	sw.	T. A. Mathews.
Odell	do	1,000	1	41.2		58	22	27	29	20	3.08		0.78	0	13	7	6	17	w.	L. D. Decker.
Ordley	Wasco	1,600	1	41.2		58	22	27	29	20	3.08		0.78	0	13	7	6	17	w.	E. C. Woodward.
Paisley	Lake	4,500	9																	S. G. Babson.
Parkdale	Hood River	1,650	2	40.8		58	22	29	30	28										

TABLE 1.—*Climatological data for November, 1912. District No. 12—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.								Precipitation, in inches.				Sky.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	
<i>Oregon—Continued.</i>																	
Wallace Orchard.....	Polk.....	170	3	45.6	.....	60	12	27	28	24	6.42	.....	1.38	0	16	0	Chas. A. Park.
Wallowa.....	Wallowa.....	2,935	9	36.6	.....	63	9	16	26	32	1.72	.....	0.35	0.6	18	8	L. J. Coverstone.
Warmic.....	Wasco.....	1,500	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. J. Swift.
Warmspring.....	Crook.....	1,500	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Claude C. Covay.
Wasco.....	Sherman.....	1,263	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Howell.
Westfall.....	Malheur.....	3,000	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. M. Gilliam.
Weston.....	Umatilla.....	1,800	20	42.4	+ 1.5	63	18+	23	24	28	2.03	- 1.15	0.50	0	7	0	M. A. Baker.
Williams.....	Josephine.....	1,368	20	44.7	- 0.4	69	8	25	21	34	4.26	- 1.91	1.30	0	12	7	Francis J. Le Roy.
Yonna.....	Klamath.....	4,146	5	38.7	.....	59	26	10	28	42	2.56	.....	0.83	1.0	7	4	Jacob Rueck.

\*1, 2, 3, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

\*\* Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow.

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TABLE 2.—*Daily precipitation for November, 1912. District No. 12, Columbia Valley.*

Stations.	Watershed.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
<i>Montana.</i>																															
Anaconda.....	Missoula.....	.03	.	*	.35	T.	.15	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	T. 0.53
Butte.....	do.....	.05	.	.25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.08	.	.	.	.	.	.	.	.	.	.	0.43
Columbia Falls.....	Flathead.....	.05	.07	.06	.10	.14	.25	.33	.10	.	.	.	.	.	.	.	.	.	.	.03	.	.	.	.	.	.	.	.	.	1.82	
Como.....	Bitter Root.....	.05	.05	.52	.01	.04	.25	.01	.10	.02	.	.	.	.	.	.	.	.	.	.12	.	.	.	.	.	.	.	.	.	1.21	
Dayton.....	Flathead.....	.20	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.20
Deer Lodge.....	Missoula.....	.	.	.02	.50	.	.	.03	.	.	.	.	.	.	.	.	.	.	.	.03	.	.	.	.	.	.	.	.	.	0.59	
East Anaconda II.....	do.....	.02	*	.36	T.	T.	.09	T.	.	.	.	.	.	.	.	.	.	.	T.	T.	.	.	.	.	.	.	.	.	.	0.47	
Fortine.....	Kootenai.....	T.	.10	.08	.10	.	.20	.22	.	.24	.08	.	.	.	.	.	.	.	.20	.02	.	.	.	.	.	.	.	.	1.27		
Hamilton.....	Bitter Root.....	T.	.04	.02	.23	.42	.03	.26	.14	T.	T.	.	.	.	.	.	.	.	.04	T.	.	.	.	.	.	.	.	.	1.22		
Hat Creek.....	Missoula.....	.03	.05	.07	.09	.36	.	.05	.18	.	.	.	.	.	.	.	.	.	T.	.15	.	.	.	.	.	.	.	.	1.08		
Haugan.....	do.....	.12	.25	.35	.10	.76	.11	.58	.30	.12	.62	.	.	.	.	.	.	.	.35	.	.	.	.	.	.	.	.	3.66			
Heron.....	Columbia.....	.54	.50	.27	.51	.37	.56	.58	.50	.52	.07	.41	.	.	.	.	.	.	.03	.	.	.	.	.	.	.	.	4.97			
Kalispell.....	Flathead.....	.01	T.	.04	.06	.02	.12	.30	.06	T.	T.	.	.	.	.	.	.	.	.10	.	.	.	.	.	.	.	.	0.83			
Libby.....	Kootenai.....	.13	T.	.10	.33	.23	.42	.50	.65	.13	.35	.10	.20	.	.	.	.	.	.05	.	.	.	.	.	.	.	.	3.26			
Lost Creek.....	Missoula.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	0.54		
Missoula.....	do.....	.01	.15	.	.20	.18	T.	.04	.16	.	T.	.	.01	.06	.	.	.	.	.01	T.	.	.	.	.	.	.	.	.	1.93		
Ophir.....	do.....	T.	.22	.	.35	.	.	T.	.40	.14	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	1.13	
Ovando.....	do.....	T.	.25	.05	.12	.15	.05	.28	.22	.06	.12	.	.	.	.	.	.	.	.03	T.	.	.	.	.	.	.	.	.	1.39		
Philipsburg.....	do.....	.	.	.05	.20	.15	.20	.10	.20	.	.	.	.	.	.	.	.	.	.02	.	.	.	.	.	.	.	.	0.98			
Plains.....	Columbia.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3.01	
Pleasant Valley.....	Kootenai.....	.27	.30	.07	.12	.20	.25	.62	.37	.08	.20	.10	.28	.02	.03	.	.	.	.	.	.	.	.	.	.	.	.	.	0.50		
Polson.....	Flathead.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.77	
St. Ignatius.....	do.....	T.	.23	.	.10	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2.62		
Saltse.....	Missoula.....	.28	.	.32	.12	.42	.22	.12	.10	.48	.	.	.14	.	.	.	.	.	.	.10	.	.	.	.	.	.	.	.	1.07		
Stevensville.....	Bitter Root.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.01	.	.	.	.	.	.	.	.	0.94		
Thompson Falls.....	Columbia.....	.05	.09	.08	.18	.21	.05	.55	.15	.06	.35	.02	.18	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2.03			
Trout Creek.....	do.....	.21	.38	.72	.85	.60	.94	1.12	.86	.59	.26	.86	.10	.38	.	.	.	.	.	.10	.	.	.	.	.	.	.	.	8.53		
WillowGlenstck farm	Missoula.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.01	
<i>Wyoming.</i>																															
Afton.....	Snake.....	.10	.12	.	.	.05	.	.	.	.	.	.	.	.	.	.	.	.	.21	.	.	.	.	.	.	.	.	.	.	0.66	
Alta.....	do.....	.	.12	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.00	2.70	.	.	.	.	.	.	.	.	.	4.33	
Bechler River.....	do.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.18	.	.	.	.	.	.	.	.	.	0.94	
Bedford.....	do.....	T.	.25	.	.16	.08	.	.	.	.	.	.	.	.	.	.	.	.	.09	.10	.	.	.	.	.	.	.	.	0.94		
Moran.....	do.....	.	.	.01	.15	.	.20	.13	.	.09	.06	.02	.	.	.	.	.	.	.08	.	.	.	.	.	.	.	.	0.94			
Snake River.....	do.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
<i>Nevada.</i>																															
San Jacinto.....	Snake.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.06
<i>Utah.</i>																															
Standrod.....	Raft.....	.05	.11	.	.14	.	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	0.87		
<i>Idaho.</i>																															
Albion.....	Snake.....	.15	.12	.14	.50	T.	.	.	.	.	.	.	.	.	.	.	.	.	.70	.	.	.	.	.	.	.	.	.	1.06		
Almo.....	do.....	.10	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.09	.17	.	.	.	.	.	.	.	.	1.73	
American Falls.....	do.....	.18	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.12	
Arrowrock.....	Boise.....	.01	.	.14	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.65	
Blackfoot II.....	Blackfoot.....	.22	.	T.	.20	T.	.	T.	.15	.	.	.	.	.	.	.	.	.	T.	.10	.	.	.	.	.	.	.	.	0.85		
Blackfoot Dam.....	do.....	.02	.26	.	.10	.	.	.	.	.	.	.	.	.	.	.	.	.	.14	.05	.	.	.	.	.	.	.	.	1.03		
Bogus Creek.....	Payette.....	T.	.22	.14	.47	.31	.11	.	.	.	.	.	.	.	.	.	.	.	.15	.31	.18	.	.	.	.	.	.	.	2.51		
Boise.....	Boise.....	T.	.09	T.	.16	.40	T.	T.	.	.	.	.	.	.	.	.	.	T.	.05	.	.	.	.	.	.	.	.	0.88			
Bonners Ferry.....	Kootenai.....	.03	.45	.35	.05	.70	.40	.21	.25	.55	.20	.20	.02	.	.	.	.	T.	.04	.	.	.	.	.	.	.	.	4.45			
Boulder Mine.....	Boise.....	.22	.15	.51	.1.07	.08	.08	.11	.07	.11	.50	.	.	.	.	.	.	T.	.01	.	.	.	.	.	.	.	.	3.15			
Buhl.....	Snake.....	.11	.06	.02	.72	.	.01	.14	.	.	T.	.	.	.	.	.	.	T.	.19	.	.	.	.	.	.	.	.	1.07			
Caldwell.....	Boise.....	T.	.20	.42	.01	T.	.	.	.	.	T.	.	.	.	.	.	.	T.	.20	.	.	.	.	.	.	.	.	0.92			
Caldwell Exp. Sta.....	do.....	.04	.	.17	.46	.	.	.	.	.	T.	.	.	.	.	.	.	T.	.20	.	.	.	.	.	.	.	.	0.95			
Cambridge.....	Weiser.....	1.00	.40	.	.	.05	.02	T.	.	.	.	.	.	.	.	.	.	T.	.20	.	.	.	.	.	.	.	.	2.00			
Cedar Creek Dam.....	Snake.....	.03	.26	.	.29	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	1.20			
Chesterfield.....	Port Neuf.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.32		
Clark's Fork.....	Pend Oreille.....	.37	.34	.51	.45	.40	.51	.71	.52	.73	.75	.06	.45	.03	.	.	.	T.	.04	.	.	.	.	.	.	.	.	6.11			
Clyde.....	Lost River reg'n.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
Council.....	Weiser.....	.35	.01	.80	.1.08	.01	T.	.14	.	T.	.20	.	.14	T.	.	.	.	T.	.35	.11	.	.	.	.	.	.	.	3.19			
Culdesac.....	Clearwater.....	.32	.	.10	.31	.	.	.	.	.	.50	.08	.02	.26	.	.	.	T.	.20	.	.	.	.	.	.	.	.	2.05			
Deary.....	do.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	T.	.12	.	.	.	.	.	.	.	.	2			

TABLE 2.—*Daily precipitation for November, 1912. District No. 12—Continued.*

Stations.	Watershed.	Day of month.																													Total		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
<i>Idaho—Continued.</i>																																	
Mesa II.	Weiser.	.16	.26	.96	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	.34										1.90		
Middle Fork.	Clearwater.	.04	.12	.25	.05	.40	.35	.03	.45	.35	.04	.30	.06	.05																	2.89		
Milner.	Snake.	.30	.13	.55	.75																											1.56	
Moscow.	Palouse.	.20	.55	.30	.34	.12	.04	.12	.26	.02	.30	.02	.25	.02																	2.60		
Mountainhome.	Snake.	*.14	.02	.42				T.																								0.98	
Murtaugh II.	do.	*.27																														1.56	
New Meadows.	Salmon.																																0.79
Nez Perce.	Clearwater.	.44																															0.44
Oakley.	Snake.																																0.95
O'Hara Bar.	Clearwater.																																0.85
Orofino.	do.	.70	.20	.10	.34	.03	.02	.38	.02	.01	.45		.09	.02																		0.86	
Payette.	Payette.	.25	.01	.39	.56	.01	T.																										1.50
Pierson.	Salmon.																																1.44
Pine.	Boise.																																0.61
Pleasant Valley.		.29																															1.13
Pocatello.	Port Neuf.	T.	.13	.23																													1.13
Pocatello Nursery.	do.	.23	.12	.31	.25																												0.95
Poplar.	Snake.	.08	.14	.08	.14																												0.95
Porthill.	Kootenai.	.05	.28	.35	.09	.72	.35	.63	.30	.23	.25	.10																			0.95		
Powers Ranch.	Boise.	.30	T.	.16																													0.59
Priest River Exp.	Pend Oreille.	T.	.30	.22	.66	.56	.11	.44	.57	.88	.20	.55	.34	.25	.01	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	5.18	
Station No. 1.																																	
Priest River Exp.		T.	T.	.26	.20	.72	.57	.09	.45	.57	.82	.25	.60	.31	.21	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	5.13		
Station No. 2.		T.	T.	.30	.25	.85	.61	.11	.82	.55	.82	.26	.64	.30	.22	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	T.	5.83		
Priest River Exp.																																	
Station No. 3.																																	
Pyle Creek.	Payette.	.10	.10	.20	1.11	.03																										0.88	
Rattlesnake Creek.	Boise.	.08	.19	.15	.90		T.																									1.96	
Richfield.	Wood-Malad.	T.		.69	.10	T.																										0.79	
Roseberry.	Payette.	.07	.02																														0.90
Roseworth.	Snake.	T.	.39	.10																													0.90
Rupert.	do.																																1.53
St. Anthony II.	St. Joe.	.04	.17	.32	.76	.40	.14	.05	.20	.37	.10	.60		.39																		0.92	
St. Maries.	Salmon.																																3.59
Sandpoint.	Pend Oreille.	.30	.15	.52	.62																											0.23	
Sheep Hill.	Boise.	.21	.06	.30	1.40	.02	.03	T.	T.																						0.06		
Shoshone.	Wood-Malad.	.03	.03																													2.43	
Silver City.	Owyhee.	.24	.14	.08	.77	.01	.05																								0.72		
Smith Prairie.	Boise.																																1.79
Soldier Creek.	Wood-Malad.	.12	.14	1.03	.03	.28																										1.79	
Spirit Lake.	Pend Oreille.																																0.55
Springfield.	Snake.	.05																															0.55
Spring Hill.	Boise.	.10		.08	.56																												0.55
Sugar II.	Snake.	.03																															0.39
Sunnyside.	do.	.01	.04	.40	.04																											0.72	
Tripod Mountain.	Payette.																																1.10
Twin Falls.	Snake.	.18	T.	.64																													0.98
Vernon.	do.	.20																															0.98
Wallace.	Coeur d'Alene.	.22	.46	.58	.59	.49	.32	.73	.57	.18	.80	.01	.48																		5.75		
Weiser.	Weiser.	.25	T.	.38	.30	T.	T.	T.																								4.41	
Wendell.	Wood-Malad.	.05	.22	T.	.85																											1.18	
<i>Washington.</i>																																	
Aberdeen.	Coast.	.06	.20	.62	1.32	.39	1.23	.69	1.15	.23	.21	1.08	1.49	.55	.59		.03	.98	.13	.35	.06	.08	.11									12.65	
Anacortes.	Puget Sound.	.13	.08	.03	.16	.22	.11	.17	.30	.22	.18	.79	.03					.13	.08	.44	.06	.03	.22	.07								3.78	
Anatome.	Snake.	T.		.37	.23	.45	.05	.05	.27	.02	.28																				1.99		
Baker.	Puget Sound.	T.		.27	.32	.33	.38	.41	.63	.63	.38	.62	.65	.77					.62	.87	.128	.14	.09	.40							9.71		
Bellingham, near.	do.	.07	.02																													4.19	
Blaine.	do.	.13	.08																													4.05	
Blewett.	Wenatchee.																															2.29	
Bremerton.	Puget Sound.																															2.29	
Brewster.	Columbia.	.03	.05																													1.57	
Bumping Lake.	Yakima.	.01	.02	.80	1.00																										6.57		
Cedar River.	Puget Sound.																																
Centralia.	Coast.	.16	.20																													7.34	
Cle Elum.	Yakima.																															3.01	
Clearbrook.	Puget Sound.	.41	.13	.24	.69	.81	.36	.04	.80	.43	.03	.50	.93																		9.80		
Colfax.		.25																														2.45	
Colville.		.08	.24	.30	.12	.04	.08	.80	.33	.42	.31	.41	.18	.08																3.48			
Conconully.	Okanogan.	.14																														0.04	
Cowiche.	Yakima.																																

TABLE 2.—*Daily precipitation for November, 1912. District No. 12—Continued.*

Stations.	Watershed.	Day of month.																																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total.						
Washington—Contd.																																						
Kiona.	Yakima.	.10	.08	.41	.28	.34	.24	.56	.26	.18	.16	.67	.82	.04	.08																							
Kosmos.	Columbia.	.12	.18	.02	.68	.20	.45	.09	.00	.63	.06	.02	.04	.12	.30																							
La Center.	do.																																					
La Crosse.	T.	.24																																				
Lake Clealum.	Palouse.	T.	.43	.57	.41	.05	.43	.34	.62	.46	.72	.04	T.	.03																								
Lake Kachess.	Yakima.	T.	.02	.60	.59	.16	.52	.45	.29	.52	.45	.50	.15																									
Lakeside.	do.	.06	.12	.88	.53	.30	.73	.99	.35	.74	.13	.60	.40																									
Laurel.	Columbia.	.14	.02	.10	.05	.03	T.	.55	.14	.31	.09	.06	T.																									
Laurier.	do.	.01	.05	.52	1.03	.43	.68	.69	.71	.33	.01	.28	.18	.09	.30																							
Lone Tree.	Kettle.	.05	.28	.02	.23	.05	.05	.42	.20	.40	.26	.20	.14																									
Longmires Springs.	Coast.	.15	.24	.74	.92	.76	.38	.41	.27	.28	.07	1.51	.168	.67	.03	.03	T.	.56	1.56	.98	.06	T.	.2	0.01	.10	T.	T.	T.	.63	.10	13.34							
Lost Creek.	Puget Sound.																																					
McConihe.	Columbia.	.10																																				
McCumbers Ranch.	do.	.11																																				
Moses Lake.	do.	.05																																				
Mettinger.	do.	.11																																				
Mount Pleasant.	Coast.	T.	.05	.04	.15	.60	.50	.25	.17	.39	.37	1.10	.01																									
Moxee.	Yakima.	.02																																				
Newport.	Pend Oreille.	.14	.30	.43	.71	.47	.09	.87	.62	.45	.32	.55	.32	.20																								
North Head.	Coast.	.44	.63	.61	.95	.06	.23	1.08	.19	.19	.54	1.16	.34	.13	.07																							
Northport.	Columbia.	.20	.15	.24	.21	.14	.16	.56	.33	.05	.30	.26	.21																									
North Yakima.	Yakima.	.01																																				
North Sundale.	Columbia.	.07																																				
Odessa.	do.	.30	.07	.20	.16	.08	.02	.14	.43	.02	.19	.15	.16	.37																								
Olga.	Puget Sound.																																					
Olympia.	do.	.20	.14	.75	.35	.45	.52	1.50	.45	1.10	.72	.86	.54	.10	.08																							
Omak.	Okanogan.	.20	.03	T.	.12	T.																																
Oroville.	do.	.30																																				
Peola.	Snake.	.35	.10	.10	.52	.21	T.	.24	.19	.09	.15																											
Pomeroy.	do.	.30	T.	T.	.07																																	
Port Crescent.	Coast.	.02	.10	.03	.08	.03	.64	.38	.24	.23	.13	.36	1.34	.02	T.																							
Port Townsend.	Puget Sound.																																					
Fullman.	Palouse.																																					
Quinault.	do.	.01	.31	.66	.84	.77	.47	.70	.54	.36	.68	2.81	.80	.87	.04	.08	T.	.73	1.35	.91	.41	.02	2.02	.02	.13	T.	.02	.01	.75	.17	16.48							
Republic.	Kettle.	1.10	.46	2.00	1.01	.60	.40	.90	.25	1.10	.65	1.90	2.00	1.80	.04	.04	T.	.63	2.10	1.52	.60	.05	2.30	.05	.15	.02												
Rex Creek.	Columbia.	.33	.06	.06	.17	.30	.30	.97																														
Ritzville.	do.	.60	.05																																			
Robertsville.	do.	T.	.42	.42	.46	.62	.35	.73	.25	.75	.90	.17	.32	.04																								
Rock Lake.	Palouse.																																					
Rosalia.	do.	.05	.20	.36	.44	.15	.06	.05	.38	.05	.26	.26	.01	.28																								
Russells Ranch.	Yakima.	T.	.08	.24	.16	.24	.60	.44	.54	.50	.50	.11	.09																									
Seattle.	Puget Sound.	.03	.12	.08	.34	.09	.72	.69	.81	.29	.30	.30	.48	.17	.09																							
Sedro Woolley.	do.	.31	.05	.12	.05	.40	.10	.28	.30	.25	.05	.07	.81																									
Sixprong.	Columbia.	.05	.05																																			
Skagit Power Dam.	Puget Sound.																																					
Snohomish.	do.	.11	.20	.32	.20	.31	.35	.65	.85	.25	.35																											
Snoqualmie Falls.	do.	.20	.11	.40	.52	.74	.52	1.32	.71	.63	.53	.42	.98	.02	.08																							
Snoqualmie Pass.	do.																																					
Snyders Ranch.	Columbia.	T.	.30	T.	.07	.45	.20	.05	.18	.10	.04																											
South Bend.	Coast.	.15	.51	.52	.50	.90	.17	1.28	.80	.35	1.40	1.09	1.55																									
Spokane.	Spokane.	.10	.13	.28	.03	.23	T.	.18	.38	.11	.23	.36	.13	.11																								
State University.	Puget Sound.	.10	.10	.15	.30	.40	.88	.57	.82	.60	.14	.51	.25	.14	.07																							
Stokes Ranch.	Columbia.	.10																																				
Sumner.	Puget Sound.	.02	.21	.09	.35	.23	.40	.54	.00	.55	.73	.24	.39	.65	.05	.08																						
Tacoma.	Puget Sound.	.08	.15	.07	.51	.61	.53	.93	.23	.45	.45	.63	.48	.14																								
Tatoosh Island.	Coast.	.18	.10	.58	.78	.20	.71	.73	.03	.73	.43	.83	.18	.06																								
Touchet.	Yakima.	.14	.11	.51	.21	1.00	.05	.05	.64	.41	.52		.33	.10																								
Touchet Ridge.	do.	.73																																				
Trinidad.	do.																																					
Vancouver.	do.	.26	.16	.36	.11	.48	.34	.99	.35	.17	.33	.89	.43	.13																								
Vashon Island.	Puget Sound.	.01	.20	.01	.35	.38	.71	.64	1.02	.55	.51	.50	.52	.02	.12	.01																						
Wahluke.	Columbia.	.27	.36	.26	.28	.38		.26	.22	.21	.48	.10	.12																									
Wallace.	do.																																					
Walla Walla.	Columbia.	.13	.26	.20	.05	.15	T.	.55	T.	.02	.08	.03	.22	.07																								
Washougal.	do.	.25	.23	.27	.40	.40	.45	.98	.58	.18	.60	.03	.60	.20	.40</td																							

TABLE 2.—*Daily precipitation for November, 1912. District No. 12—Continued.*

TABLE 2.—*Daily precipitation for November, 1912. District No. 12—Continued.*

\* Precipitation included in that of the next measurement.

† Separate dates of falls not recorded.

Precipitation for the 24 hours ending on the morning when it is measured.  
T Precipitation is less than 0.01 inch rain or melted snow.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures at selected stations for November, 1912. District No. 12, Columbia Valley.

Date.	Montana.						Idaho.														Vernon.		Wallace.				
	Kalispell.		Missoula.		Afton, Wyo.		Boise.		Bonners Ferry.		Hot Spring.		Lewiston.		Mackay.		New Meadows.		Pocatello.		Salmon.		Shoshone.		Vernon.		
	Max.	Min.	Max.	Min.			Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
1....	37	19	42	18	47	.....	53	30	48	20	55	32	48	29	40	14	.....	49	25	45	15	48	26	45	17	42	25
2....	34	26	38	22	45	.....	54	36	53	31	57	39	46	34	40	22	.....	47	35	48	22	.....	43	21	45	28	
3....	41	28	46	30	44	.....	50	30	42	30	60	43	45	27	38	21	.....	46	35	48	26	49	34	40	31	39	34
4....	43	32	39	29	41	.....	47	34	46	32	55	32	50	37	40	23	.....	44	32	53	28	47	30	38	31	36	32
5....	45	33	46	30	40	.....	47	42	44	35	54	33	53	43	42	17	.....	47	31	52	28	48	25	40	23	43	33
6....	50	34	44	35	40	.....	54	43	45	39	57	43	60	43	38	31	.....	50	37	50	40	49	.....	38	30	46	35
7....	42	35	40	32	45	.....	55	42	48	30	58	40	53	38	45	27	.....	51	40	48	32	52	34	46	33	40	34
8....	40	31	44	29	53	.....	66	45	48	37	62	42	50	42	42	26	.....	60	42	54	31	58	37	50	31	46	32
9....	49	35	60	38	58	.....	68	55	52	38	72	42	60	44	44	24	.....	62	50	60	35	63	42	60	31	50	41
10....	46	32	50	36	58	.....	56	35	47	40	65	43	55	40	46	26	.....	58	37	53	42	56	39	54	31	46	33
11....	43	36	50	33	44	.....	51	30	44	35	62	48	53	38	54	23	.....	44	32	50	26	47	29	40	29	46	34
12....	46	36	51	39	44	.....	58	47	47	34	60	48	53	43	42	22	.....	48	33	58	34	54	28	45	26	45	38
13....	58	34	56	33	53	.....	61	40	49	36	60	38	56	40	46	20	.....	55	30	60	28	53	.....	50	29	53	34
14....	42	34	42	30	51	.....	54	44	46	36	56	42	51	40	45	19	.....	55	30	52	25	52	.....	61	24	40	34
15....	40	30	41	30	44	.....	50	38	44	33	57	33	53	36	46	25	.....	43	32	46	31	52	.....	50	34	41	28
16....	40	31	47	36	35	.....	55	34	46	31	56	28	54	32	47	22	.....	47	25	49	34	54	27	48	24	42	31
17....	34	26	43	24	40	.....	59	32	46	36	60	38	51	36	46	20	.....	55	27	48	20	55	29	49	24	44	30
18....	44	28	46	24	51	.....	60	34	42	38	62	34	52	38	47	22	.....	55	37	48	23	60	20	50	25	55	34
19....	46	30	46	26	51	.....	58	39	57	41	60	40	47	36	41	19	.....	52	36	51	25	50	33	52	25	46	35
20....	43	30	44	32	41	.....	45	33	51	38	58	36	54	31	39	27	.....	39	31	48	23	44	22	49	26	41	33
21....	45	30	52	24	41	.....	48	28	48	36	52	24	57	38	35	13	.....	46	25	43	16	53	23	39	21	50	33
22....	55	41	59	35	40	.....	49	32	52	35	53	32	59	34	32	28	.....	51	33	52	24	58	.....	45	18	54	40
23....	49	29	47	25	39	.....	41	28	48	29	38	22	50	31	39	19	.....	46	27	38	16	45	.....	44	18	43	31
24....	48	25	47	23	44	.....	44	25	55	30	45	19	43	38	39	23	.....	44	23	40	13	42	18	54	17	37	26
25....	38	21	39	24	41	.....	45	26	43	22	45	22	47	28	40	16	.....	44	23	40	14	45	18	47	22	38	24
26....	35	18	39	20	38	.....	41	25	36	5	47	21	39	28	37	12	.....	39	21	38	17	41	19	36	15	36	20
27....	31	14	36	15	38	.....	43	27	33	4	50	25	44	30	40	9	.....	46	14	36	9	47	26	35	10	38	20
28....	41	26	40	24	40	.....	42	28	33	3	47	27	46	30	40	18	.....	49	27	37	15	43	26	40	15	32	27
29....	30	22	34	22	50	.....	45	24	33	4	50	26	39	30	39	8	.....	51	25	40	12	48	22	43	15	38	22
30....	34	25	39	24	41	.....	44	27	38	9	53	24	40	32	34	9	.....	47	29	40	17	41	32	33	23	34	31
Mns.	42.3	28.9	44.9	28.1	44.6	.....	51.4	34.7	45.8	28.9	55.5	33.8	50.3	35.9	41.4	20.2	.....	49.0	30.8	47.5	24.0	50.1	28.4	45.2	24.0	42.9	31.1

## Washington.

Date.	Aberdeen.		Blaine.		Colville.		Kosmos.		Lakeside.		North Head.		North Yakima.		Odessa.		Port Crescent.		Seattle.		Sixpont.		Spokane.		Tacoma.		Tatoosh Island.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	50	43	54	42	42	20	58	46	47	33	52	47	52	29	47	30	52	39	61	46	53	31	47	32	58	47	53	46
2....	53	44	51	44	40	25	52	42	44	37	50	46	45	37	42	33	48	39	52	43	54	33	41	33	52	43	50	46
3....	50	38	51	40	41	32	48	39	43	37	49	41	48	36	43	32	48	31	50	42	52	32	41	37	50	40	47	42
4....	52	42	49	41	42	34	47	41	42	34	50	44	44	29	45	30	46	31	47	42	55	40	49	40	50	43	43	45
5....	52	43	50	42	45	35	50	38	45	37	52	46	56	30	51	36	50	39	52	43	47	41	43	41	53	45	50	45
6....	50	41	50	42	48	39	51	37	48	36	51	45	55	29	53	37	47	39	50	43	58	44	51	39	52	41	42	42
7....	50	39	48	40	49	36	45	41	53	38	51	46	55	33	47	35	48	39	51	40	56	44	49	37	52	40	51	42
8....	51	39	48	40	48	37	46	37	45	37	50	40	48	40	42	45	38	47	41	58	42	54	42	47	40	51	44	44
9....	45	37	45	38	47	35	50	38	42	34	52	41	46	37	50	37	43	32	46	37	55	41	52	39	43	40	47	40
10....	50	42	45	38	44	32	51	40	46	32	51	45	53	33	49	40	44	35	47	39	53	41	57	43	49	37	50	43
11....	52	44																										

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1912. District No. 12—Continued.*

Date.	Walla Walla, Wash.	Oregon.																Vale.			
		Ashland.		Baker.		Eugene. §§		Gold Beach.		Hermiston.		Marshfield.		Portland.		Prineville.		Roseburg.		The Dalles.	
		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.	40	26	55	46	47	29	58	33	53	46	52	22	.....	.....	52	46	48	39	.....	52	25
2.	41	34	50	39	46	35	50	34	56	47	42	32	.....	.....	49	44	52	45	.....	53	39
3.	50	36	50	38	44	31	56	37	58	50	51	34	.....	.....	48	42	52	39	.....	50	35
4.	55	40	53	45	45	29	58	42	53	44	56	39	.....	.....	51	45	53	42	.....	53	28
5.	60	48	50	45	45	37	60	41	58	50	54	45	.....	.....	55	48	56	52	.....	48	36
6.	57	45	58	46	54	39	61	43	58	46	60	44	.....	.....	55	44	59	41	.....	59	44
7.	59	45	50	42	48	34	65	42	57	50	57	32	.....	.....	55	44	56	41	.....	58	38
8.	68	48	68	42	57	42	67	38	54	50	52	42	.....	.....	56	46	69	48	.....	58	42
9.	56	36	57	44	61	45	68	38	57	47	60	33	.....	.....	55	44	56	45	.....	66	41
10.	54	34	49	39	50	25	70	40	55	45	60	32	.....	.....	55	47	54	44	.....	66	42
11.	58	42	54	39	47	23	69	44	55	47	60	42	.....	.....	55	46	57	48	.....	51	26
12.	64	48	62	47	53	39	70	42	60	53	59	39	.....	.....	61	47	64	52	.....	60	38
13.	62	46	58	45	51	40	68	48	60	48	54	44	.....	.....	57	44	60	45	.....	58	30
14.	50	42	58	41	50	40	65	40	57	47	61	38	.....	.....	50	41	56	41	.....	56	37
15.	54	39	50	33	50	28	60	36	59	42	55	22	.....	.....	55	47	55	36	.....	57	36
16.	41	37	63	34	50	27	64	32	59	43	52	29	.....	.....	57	47	53	37	.....	51	25
17.	43	34	64	58	48	32	66	33	62	46	45	27	.....	.....	53	38	51	39	.....	49	24
18.	65	34	.....	53	34	69	35	65	55	42	32	.....	.....	58	47	60	37	.....	50	27	
19.	65	40	55	49	36	65	38	59	47	52	36	.....	.....	51	44	51	41	.....	45	28	
20.	54	39	43	44	26	60	37	54	39	57	29	.....	.....	53	43	53	36	.....	57	31	
21.	65	44	47	47	28	62	31	58	39	52	29	.....	.....	51	36	56	29	.....	46	22	
22.	66	43	45	49	28	64	32	56	40	55	27	.....	.....	49	39	52	33	.....	49	28	
23.	51	33	53	47	25	65	34	56	40	56	23	.....	.....	42	33	47	36	.....	44	22	
24.	54	36	43	31	45	21	68	32	61	45	48	22	.....	.....	50	40	44	39	.....	49	17
25.	38	32	42	24	42	17	64	38	60	43	54	22	.....	.....	51	37	43	40	.....	44	19
26.	35	32	43	24	41	17	63	31	60	44	46	23	.....	.....	52	37	41	38	.....	48	18
27.	43	29	48	32	42	26	68	32	58	42	43	19	.....	.....	50	36	47	36	.....	50	17
28.	48	30	44	28	42	22	66	34	54	39	49	23	.....	.....	45	31	46	40	.....	48	21
29.	47	29	36	26	41	24	65	36	50	39	46	23	.....	.....	48	33	49	39	.....	42	15
30.	46	38	38	31	41	18	.....	32	52	43	52	24	.....	.....	51	42	50	39	.....	48	34
Means....	53.0	38.0	51.2*	38.3†	47.6	29.9	63.9*	36.8	57.3	45.2	52.7	30.9	.....	.....	52.3	41.8	53.0	40.6	.....	52.2	29.5

\*, †, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§ § Instruments are read in the morning. the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

NOTE.—In the Monthly Weather Review for October, 1911, on pp. 1599-1601 and 1603-1606, inclusive, make the word "July," in italics in the headline, read "October."